TT 687
.A29

A 29

TREATISE

ON THE

ART OF KNITTING,

WITH A

HISTORY OF THE KNITTING LOOM:

COMPRISING AN

INTERESTING ACCOUNT OF ITS ORIGIN,

AND OF ITS RECENT

WONDERFUL IMPROVEMENTS,

BY J. B. AIKEN.

FRANKLIN, N. H.:
PUBLISHED BY THE INVENTOR.
1861.

AIKEN'S FAMILY KNITTING MACHINE—AT HOME.

TREATISE

ON THE

ART OF KNITTING,

WITH A

HISTORY OF THE KNITTING LOOM:

COMPRISING AN

INTERESTING ACCOUNT OF ITS ORIGIN,

AND OF ITS RECENT

WONDERFUL IMPROVEMENTS,

BY J. B. AIKEN.

"Si quaeris monumentum, circumspice."

FRANKLIN, N. H.:
PUBLISHED BY THE INVENTOR.
1861.

458

TT67
.A37

Entered according to Act of Congress, in the year 1861, by
J. B. AIKEN,
In the Clerk's Office of the District Court of the United States for the Southern District of New-York.

CONCORD, N. H.:
PRINTED BY M'FARLAND & JENKS.

CH 9-5901

CONTENTS.

Page.

Origin of the Art of Knitting,..... 5
Rapid dissemination over Europe,..... 5
Queen Elizabeth wears a pair of knit stockings,..... 5
Invention of The Old Knitting Frame,..... 6
William Lee, its inventor,..... 6
Not patronized by the English Crown,..... 7
Settles in Normandy under invitation of Henry the Fourth,..... 8
His struggles, disappointments, and melancholy death,..... 8
Portrait in the Stocking Weavers' Hall, London,..... 9
Lee's Frame improved by Strutt,..... 9
Invention of the Power Knitting Loom,.....10
Timothy Bailey starts it at Cohoes, N. Y.,.....11
Recent improvements in knitting machinery,.....11
Origin of the Circular Knitting Loom,.....12
Introduction into this country,.....12
Aiken's unrivaled FACTORY MACHINE,.....12
Superseding all others,.....12
Its flattering reception in Europe,.....12
AIKEN'S FAMILY KNITTING LOOM,.....13
Value of Knit Fabrics made upon Aiken's Loom,.....13
Other looms adapted to the wants of the few,.....13
The Family Machine for the toiling masses,.....13
Six years in maturing the invention,.....14
Made in two different styles,.....14
Foot Power Family Machine,.....14
Hand Power or Portable Machine,.....14
Specially designed for the Family and Plantation,.....15
Improves the condition of woman,.....16
Value of Knit Fabrics annually imported,.....17
Spring or Bearded Needle,.....17
Aiken's Self-Acting Improved Needle,.....18
Family Machine saves four distinct profits,.....19

That of the Manufacturer, the Commission Merchant, the Jobber, and the Retailer,.....18
Marvelous capabilities of the Machine,.....19
Knits SEVENTY-TWO THOUSAND LOOPS A MINUTE,.....20
Unlimited variety of its productions,.....20
Tools and implements with each machine,.....21
Superiority over Sewing Machine,.....22
Medals and Premiums,.....22
Testimonials of Purchasers and Operators,.....23–26
Testimonials of the Press,.....27–29
Weight and size of the Portable Machine,.....14, 32
Weight and size of the Foot Power Machine,.....14, 32
Price of the Portable Machine,.....31
Price of the Foot Power Machine,.....30
Cost of transportation,.....32
Directions to Correspondents,.....32
Directions for remittances,.....32

THE ART OF KNITTING.

The old Romans and other nations of antiquity had no particular covering for the legs. Leggins or hose, as they were then usually termed, first came into use during the Middle Ages.

The Art of Knitting was first invented about three hundred years ago. One account says that it originated in Scotland, and was introduced speedily into France, and thence soon disseminated over all Europe. Another account is, that it was introduced into England from Spain about the year 1559. Its introduction into ENGLAND, however, must have been somewhat later than 1559; because Hume, the great English historian, informs us that Queen Elizabeth, in 1561, the third of her reign, was presented by her silk woman with a pair of black silk knit stockings, the first pair of knit stockings ever worn in England, and was so delighted with them as to never wear those made of cloth afterward.

Prior to this invention, hosiery of all kinds was made of milled cloth. The immense value of the new art consisted then, as it does now, in the fact that it is the only method yet devised by which fabrics of a substantially elastic character can be manufactured. So highly was the new fabric esteemed, that it immediately went into general use. Knitting became fashionable in every circle of society. Not confined to the cottage of the peasantry, it was eagerly and ambitiously learned and practiced in princely halls and royal palaces. High-born and royal ladies even, vied with each other in the accomplishment.

The utmost ingenuity and labor was expended by these ladies in the new employment.

The Shetland Isles, famous for their splendid wool, soon became renowned for the new fabric. The exceeding fineness and elegance of their knitting became the wonder and admiration of the time. The historian informs us that a fair lady of those northern Isles once knit a pair of hose, so fine in their texture as to be drawn through her finger-ring. They were afterward presented to George the Fourth, who took vast delight in displaying them at his levees. Thus much for the old fashioned method of knitting with wires worked by the fingers.

THE FIRST MACHINE FOR KNITTING

was invented by William Lee, of Woodborough, England, about thirty years after the invention of hand knitting, and about two hundred and seventy years ago.

There is a romance connected with the origin of this invention. One version of the matter is, that Lee, falling desperately in love while an under-graduate, and marrying a pretty girl, was expelled from college; and that his attention was turned to the subject by sitting and intently gazing upon his young wife at her dim lamp, who, being a skillful knitter, contributed much in their poverty to gain them a subsistence. This account is, however, improbable in some particulars. From the inscription upon the picture in the Weavers' Hall, which will be found upon a subsequent page, it appears that he received his degree at the University, which would not probably have been the case had he been expelled.

The other account runs in this wise: Lee made love to a pretty girl in his neighborhood, who received his ardent attentions somewhat coolly. She was an accomplished knitter, and in his visits she was careful to display less devotion to him than to her hosiery. Disgusted at last

with this kind of entertainment, he resolved to devote himself to the invention of a machine to supersede her favorite employment. Accordingly, laying aside his priestly robes, and relinquishing his sacerdotal duties, he addressed himself entirely to his new idea. His sweetheart, changing her mind, endeavored in vain to dissuade him from his new object of devotion.

The old stocking weavers used to take delight in their cups, for they were always a jovial set, in dilating upon Lee's adventures with his mistress. In his visits he used to watch his sweetheart with the utmost attention, to devise, if possible, some method of giving the round shape which the *four* needles gave to the stocking. At last, calling upon her when she was using only *two* needles in forming the heel, the thought flashed upon him in a moment, to make his web flat, and, by seaming with the needle by hand, make it round. After working day and night for three years, he at last was successful in making a course upon a frame; and, after some years more of anxious and embarrassing toil, his struggles were finally rewarded in the production of what, among the stocking weavers, is known as "the old stocking frame," which, for nearly two hundred and fifty years, down even to this generation, continued to be the only knitting machine in existence, and in nearly the same condition in which it was left by the inventor.

Lee was honored with permission to exhibit his invention before Queen Elizabeth, who had been accustomed to patronize whatever ministered to her pleasure, her vanity, and her ambition. But she was now far in her dotage, and gave him no encouragement. He and his brother were permitted, also, to weave a pair of stockings upon the machine in the presence of her successor. But James withheld his patronage, assigning as his reason that the invention was calculated to deprive the poor hand knitters

of their labor and their bread; a narrow-minded conception of a stupid monarch, which, strange as it may seem, has in our own day impelled the operatives, upon these very old Lee frames, *in their turn*, to resist the introduction of the still greater improvements of modern times.

Lee, however, nothing disheartened, went straight onward in his enterprise; and, in 1597, had, at Culverton, near Nottingham, nine frames in successful operation, each of his weavers wearing, as a badge of honor, a breast-pin composed of a silver needle, a chain, and a clasp.

The fame of his invention and the report of the shabby manner in which it had been regarded at the English court having reached France, that enlightened monarch, Henry the Fourth, in accordance with the suggestions of Sully, his great minister, believing, unlike the royal James, that labor-saving inventions are essentially the means of multiplying the resources of national industry, and thus enlarging the means of living to the poor, solicited Lee to make his kingdom the theatre of his enterprise. He had, however, hardly become located with his machines in his new home, at Rouen, in Normandy, under the auspices of Henry, when his royal patron fell by the assassin hand of Ravaillac, a bigoted monk, whose fanaticism had been inflamed by the king's enlightened religious liberality. This was in 1610, precisely two and a half centuries ago. Lee, soon proscribed for his religion, took refuge in Paris, and there, in a short time, died in abject poverty. This great invention, however, did not die with him; for some of his workmen escaping back into England, and under his ingenious apprentice, Aston, again mounting the stocking frame, they restored the invention to its native country, and thus made Nottinghamshire what it is at the present day — the great seat of the knitting business in the English realm.

In the Stocking Weavers' Hall, in Red Cross Street,

London, there is the portrait of a man painted in the act of pointing to an iron stocking frame, and addressing a woman who is knitting with needles by hand. The picture bears the following quaint inscription: "In the year 1589 the ingenious William Lee, A. M., of St. John's College, Cambridge, devised this profitable art for stockings — but being despised went to France — yet of iron to himself, but to us and to others of gold; in memory of whom this is here painted."

As already intimated, this old frame continued for centuries without one notable improvement and without rival — at once a monument of inventive genius and a benefaction to the human race. The amazing stride from the old knitting needles to this knitting frame is unquestionably one of the most extraordinary single feats ever effected in mechanical invention.

In 1756, about one hundred and fifty years after Lee's death, a valuable improvement was made upon this old frame, by Jedediah Strutt, a man of genius and public spirit, of Derby, England, who was the patron of Richard Arkwright, in his inventive labors, and one of his partners at a later day in his manufacturing enterprises. This improvement, however, was no innovation upon the general features of the original machine.

It is to be remembered that this old frame was a hand machine, so heavy and complicated in its structure as to demand the strong muscular energies of one long trained to the work, to give it successful operation. Hence the great efforts and vast sums of money expended in England and on the Continent to adapt it to power, in the latter part of the eighteenth and the early part of the present century. All experiments in that direction having, however, proved entirely abortive, it had come to be the impression, almost universally, among inventors, that it

was an impossibility. What was thus abandoned as impossible by European ingenuity, was soon after completely accomplished by the inventive genius of America.

FIRST POWER KNITTING LOOM.

The first knitting machine ever operated by power in this or in any other country is believed to have been devised and constructed by Timothy Bailey, in the city of Albany. Egbert Egberts, Dr. Williams and Alfred Cook were engaged with Bailey in the enterprise. Egberts first suggested the idea of a power machine to Williams, and the services of Bailey, who was represented by Cook to be a man of great inventive powers, were solicited. They took Bailey to see one of the Lee frames, then in operation in that city. Bailey, after careful examination and one day's reflection, decided that he could do the job. Egberts immediately thereupon sent Bailey to Philadelphia with funds, to purchase an old frame upon which to commence his experiments. This was in 1831. Egberts, Williams, Cook and Bailey entered into partnership; and, employing a man by the name of Gleason, after succeeding in operating the old machine by turning a crank, Bailey commenced in good earnest to build a new machine to be operated by power. But, after awhile, the partners, including Gleason, who had been received into the company, all became discouraged; and Egberts, who, by agreement, had advanced Bailey's share of the capital, concluded to pay up the bills, and with the rest call the thing a bad speculation. Bailey, however, still had faith, and the machine was turned over to him, who said he was not in the habit of leaving a job till it was finished. He went on alone, and, in a week or two afterward, Cook and Egberts, calling on their old partner to see his operations, were amazed in seeing Bailey turn his new machine

thirty-two revolutions without missing a stitch. Egberts immediately offered Bailey five hundred dollars to put the machine in running order. The proposition was immediately accepted, and, with the assistance of his brother Joshua, in finishing it up, the machine was put in operation by

POWER

in the attic of a large building then just erected at Cohoes, in October, 1832. It was substantially the old Lee frame, adapted to power.

Timothy Bailey, the inventor of this improvement, now resides at Ballston Spa, New-York. Egbert Egberts and Joshua Bailey reside at Cohoes, where they have accumulated large fortunes in the hosiery business, which was commenced under such humble auspices.

The knitting business is believed to have been first introduced into this country by the Germans, at Philadelphia and Germantown, Pa., and by English emigrants from Nottinghamshire, who settled in New-York city, and in several other old manufacturing localities in the Middle and Eastern States. It has, however, *never to any extent passed either west or south beyond the limits of New-York and Pennsylvania.*

The improvements in knitting machines in the last thirty years, as in other departments of mechanical invention, have been marvelous. Bailey's old machine is now valuable only to the antiquarian. Lee's machine, after which Bailey modeled, was at best a clumsy, complicated, and expensive affair, and, in converting it into a power frame, it was not improved in this regard.

The old Lee invention, it is well understood, was a square frame, making a flat web, which was seamed together in forming the stocking.

The circular loom which forms the leg of the stocking

without a seam is an invention of modern date. The origin of this loom is a matter of some obscurity. It is said by some to have originated in France. Others conjecture that it was first invented by the Germans, who, it is well known, have been distinguished for their skill in the manufacture of hosiery from the period in which Lee established the business in Normandy.

There is a circular loom in limited use in this country, which is known among stocking weavers as the French Loom; but it is a complicated machine, and not adapted to the general hosiery business. It is believed, however, that the first circular loom introduced into America was brought from Belgium into Connecticut by a German, about a quarter of a century ago. There have been since then several circular looms devised in this country, but the one which is superseding all others, both in this country and Europe, is the Loom invented by J. B. Aiken, to which special allusion will hereafter be made.

There have been a variety of machines invented in the past twenty years of varied degrees of merit. There is one feature, however, which is common to them all; they have, without exception, all been designed for *manufacturing establishments*. The cost of the machine, and the expense, skill, and experience requisite to operate them, have in every case entirely precluded the idea of introducing them into private use.

THE FACTORY KNITTING MACHINE,

invented by J. B. Aiken, and which is universally regarded as superior to all others, is no exception to this fact. The admirable qualities of this machine have been thoroughly tested by more than six years of actual use in large and leading knitting establishments in various sections of this country, and it is at this time in process of

introduction, with great approbation, into the various countries of Europe.

So extensively has it already been introduced into use, that there is now manufactured upon it more than

$2,000,000

worth of hosiery and knit fabrics annually in this country alone. It stands every where confessedly without a rival in knitting machinery, and is fast superseding all others in use. But, as already stated, it is a FACTORY Machine, entirely unsuitable for *family use.*

The inevitable result of the matter has thus been to concentrate the knitting business in the hands of capitalists and corporations, and to accumulate

IMMENSE FORTUNES

in the hands of the few. In fact, the precise consequences, to a serious extent, have been realized as they were predicted by Queen Elizabeth and her successor in refusing Lee any patronage. The true, legitimate results of all labor-saving inventions which are to alleviate the condition of the masses of the people, have not been derived from the various knitting machines hitherto invented.

It was a consideration of these facts which first suggested the idea which has been developed in

AIKEN'S FAMILY KNITTING MACHINE.

The first step in the knitting invention which placed the knitting business in the possession of every family, however humble, was essentially a blessing to the toiling millions. But in the next step, when the knitting needles yielded to the heavy, complicated and costly machinery, it was the capitalists who gathered the harvest. It has been the leading and controlling idea of the inventor of Aiken's Family Machine, to turn back this business into the

and thus to vindicate the large and enlightened sagacity of Henry the Fourth and his great minister, in their patronage of Lee, on the ground that every labor-saving invention, in its full development, is essentially a blessing to the laboring poor.

This machine is the result of long and careful reflection and experiment. For more than six years the inventor has spared no toil, time nor expense, in simplifying and perfecting its parts, and adapting it to the purpose for which it is designed. By a slow, laborious and expensive process of experiment, one difficulty after another has been met and overcome, and the inventor has now the large, and in some degree proud satisfaction to present to the public a Knitting Machine so simple in construction, so easy of management, and so limited in cost as to merit a place by the fireside of every considerable family in the land. In its construction no less than five distinct patents have been secured upon its parts, beside those secured in foreign countries.

The Family Machine embraces essentially the same principles of action as those of the Factory Machine. It is in fact Aiken's Power Loom reduced to a vastly simplified form.

The Family Machine is constructed in two styles. One style is operated by the foot, and the other is operated by the hand. In every other respect the machines are precisely alike, in durability and in facility of management as well as in structure. A correct representation of each style will be found in the pages of this pamphlet.

The peculiar excellences of the hand power machine consist in its remarkable lightness and its compactness of form. Its weight and the space it occupies are about one fourth as much as are required for the foot power machine.

With all its appurtenances it may readily be packed into a common trunk with the wearing apparel, or into a box less than a foot square. It is emphatically

A PORTABLE FAMILY KNITTING MACHINE.

It may be borne from place to place with but little more trouble than a lady carries an extra bonnet, or a gentleman an extra hat, and with less liability of injury.

The Family Machine, as its name indicates, is peculiarly adapted to the uses and the wants of the

FAMILY,

in which its value is inestimable. In fact it is a fortune in itself. Any child almost can operate the machine, and one person can perform not only all the knitting of a large family, but of a whole neighborhood or ordinary country village. It is, also, a truly wonderful invention for the

PLANTATION.

With one of these machines the hands that are incapable of going to the field, or of performing other work, can easily knit all the stockings needed on any plantation. The machine is adapted to the manufacturing of the coarsest and heaviest, as well as of the finest and most delicate fabric. The clumsiest hand can operate it, and without danger of getting it out of order.

This machine, moreover, offers peculiar inducements to the formation of

CLUBS.

Inasmuch as one machine will do the entire knitting of a large neighborhood, or even of an ordinary village, it is manifest that, so far as the cost is concerned, no community need be without one of them. By the association of a few neighborhood friends in the purchase, the cost to each is reduced to a mere trifle, and the machine is so like a case knife in simplicity, and so extremely little liable to

get out of order, that it is singularly adapted to such associated use.

The Family Machine also offers great inducements to the investments of

CAPITALISTS.

No machine or instrument was ever invented better adapted to being profitably rented than the Family Knitting Machine. It does the work which is largely and positively demanded in every family. It requires no particular skill in its successful use, and is not at all liable to get out of order. Individuals, with the small means requisite to purchase these machines, can not fail of large remuneration by investing in them, and leasing to those who are not able to purchase. A smart girl, with one of these machines, can easily make

TWELVE DOLLARS A WEEK,

beside paying a large rent for the machine. In thus giving employment to the enterprising poor, the man of means would not only be doing himself a benefit, but would be eminently a public benefactor. And here it may with propriety be remarked, that this Family Machine is designed primarily and essentially to improve the condition of

WOMAN.

It not only, in an astonishing manner, lessens the labors of woman in the family, but it also furnishes a species of remunerative employment, peculiarly adapted to that sex whose diversity of employment has hitherto been too much circumscribed.

AIKEN'S FAMILY KNITTING MACHINE

belongs emphatically to woman; and when its value and excellencies are generally understood through the country, it is destined to produce a revolution in the knitting business.

As has been already suggested, the manufacturing of hosiery in this country has been hitherto monopolized by a few establishments in the New-England States, New-York, and Pennsylvania, in which rich harvests have been gathered. The Family Machine is designed to scatter the business thus monopolized into

A HUNDRED THOUSAND HOMES.

And this is not all. According to the statements of the Treasury Department, at Washington, in round numbers, more than

$5,000,000

are every year sent into foreign countries to pay for the knit goods which are yearly imported into this country. It is the mission of this Family Machine to stop this enormous importation, and to make all these fabrics, heretofore imported, on American soil and in American homes.

These statements may be regarded like exaggerations to those who are not familiar with this branch of business, and who are not apprised of the astonishing improvements in knitting machinery which have recently been developed. To those who know the character of the business, however, the matter will seem otherwise. At any rate there will be no doubt in the mind of any man who, for one moment, has witnessed the easy, rapid, and really elegant movement of Aiken's Machine, by the side of the noisy, laborious, slow, and rattling operation of "The Old Stocking Frame," which is now passing into disuse.

One of the distinguishing merits of Aiken's Machine consists in the great superiority of its needle.

There are, among the multiplicity of needles in use, but two leading varieties.

The Spring or Bearded Needle, which was first employed by Lee in "The Old Stocking Frame" nearly three hundred years ago, is the kind most generally used.

This needle is adapted to a single gage, or, as the term is more commonly used, to a single *number* of yarn only. With each change in the gage of yarn, an entire change in the set of needles is contemplated. It requires an even, smooth, soft, and pliable thread. Homespun, uneven, rough, coarse, or hard-twisted yarn can be used only with the greatest difficulty. The needles are exceedingly liable to derangement and injury, and the cost of their wear and tear is very great, not to mention the loss in labor and great damage in bad work.

The Latch or Self-Acting Needle is the other variety. This needle is the property, by patent, of the inventor of the Family Machine, and by him has recently been greatly improved. This needle is adapted to almost any description of thread. It will knit every variety of yarn, from ten to thirty gage. It will knit coarse yarn or fine, rough or smooth, hard-twisted or slack, homespun or machine-spun. It is nothing uncommon for a set to run months, and even an entire year, without moving one of them from its socket; evidence of which will be found in the testimonials of purchasers and operators, which are appended to this pamphlet.

It is hardly needful to add that the

SELF-ACTING IMPROVED NEEDLE,

employed in his Family Machine, is superior to all other inventions.

There is another thing in connection with the Family Machine. It can not fail of always being highly remunerative in its operation, because it saves so many different *profits*. Look for a single moment at the ordinary method of conducting a large knitting establishment.

In the first place there is a profit which is retained by the manufacturer of the hosiery. Then there is the profit,

and always a generous slice, which is retained by the commission house. And, still again, there is the profit of the jobber, and finally there is the profit which goes to the retailer. Here you have

FOUR DISTINCT PROFITS,

aside from the cost of the various transportations which are accumulated in the usual method of the hosiery business, and all of which is paid by the consumer. The individual who, with a Family Machine, goes into the business on a limited scale, retains the most of these profits in his own pocket, and the family and plantation which, with the Family Machine, knit their own fabrics,

SAVE IT ALL.

The advantages of the hand power machine over that which is moved by the foot have been already stated. There is a single particular in which the foot power machine also has the advantage — it is susceptible of the greater speed. But then this great law of mechanism should be remembered, namely, that, other things being equal, *the greater the speed, the greater the power required.*

The foot power machine, in its ordinary movement, knits

5,000 LOOPS A MINUTE ;

while, under similar circumstances, may be knit

4,200 LOOPS A MINUTE

upon the Hand Power Machine. So easy is the movement of the latter, however, that, when the work is properly adjusted, it may be operated by a child four years old.

These machines are, beside, readily converted into *power looms.* The owner of a Portable Machine can thus at pleasure employ either hand, steam or water power. For this purpose, at an additional expense of merely three dollars, an extra gear and stud, a tight and loose pulley are fur-

nished, which, in a moment, may at any time be adjusted to the machine. In this way the loom, when driven by power, is susceptible of knitting at the almost incredible speed of

60,000 LOOPS A MINUTE!

Its ordinary speed, however, when thus operated, is about

10,000 LOOPS A MINUTE.

CAPABILITY OF THE FAMILY MACHINE.

There is no feature in the Family Machine which is more completely astonishing, and which contributes more essentially to its eminent practical value than the great versatility of its productions.

The following are a few of the almost unlimited variety of fabrics and articles of wearing apparel which, with the most surprising facility and perfection, are made upon this truly matchless machine: viz.,

Stockings, of every size and texture,	
Undershirts,	Gents' Suspenders,
Drawers,	Nubian Scarfs,
Gents' Comforts,	Undersleeves, in great variety,
Table Covers,	Ladies' Opera Capes,
Head Dresses,	Tidies,
Cravats,	Sontags,
Capes,	Shawls,
Purses,	Rigolets, &c., &c.

THE PORTABLE MACHINE is constructed with a clamp and thumb-screw, by which it is easily attached to a common table for operation, as represented in frontispiece, and at page 31 of this pamphlet.

THE FOOT POWER MACHINE is mounted on an elegant black walnut table, which is supported by an iron

framework similar to that of an ordinarily mounted sewing machine. See illustrations, page 30. In either style it constitutes an ornamental article of furniture.

TOOLS AND IMPLEMENTS.

The following articles accompany each machine: namely.

Oil Can, Screw-Driver,
Wrench, Twenty Extra Needles,
Skein Holders, of a beautiful and improved pattern,
Winder, for winding the yarn upon the bobbin from which it is unwound in knitting, and

A BOOK OF INSTRUCTION,

containing a plain and complete explanation of the entire machine, its several parts, how to operate it and keep it in order, and how to finish up the fabrics and articles of its manufacture. In a word, there is supplied with each machine every tool and implement and all the information requisite for a person of ordinary intelligence to start successfully, without further assistance, a

HOME KNITTING ESTABLISHMENT.

The *Sewing Machine* is justly regarded as a valuable invention. The rival efforts of the multiplied inventors and manufacturers of these machines in the last few years have resulted in a very extensive introduction of them into family use, and, while some of the many inventors have scattered worthless articles upon the community, it is believed that the purchasers of really good machines have invariably deemed the purchase money as being well invested. It demands but the slightest reflection, however, to perceive that Aiken's Family Knitting Machine furnishes opportunity for altogether a more

PROFITABLE INVESTMENT.

The Sewing Machine is confined in its employment

exclusively to the solitary matter of combining portions of fabrics and materials which have already been manufactured, while a large portion of the more difficult and laborious sewing of a family it is unable to do at all.

The Family Knitting Machine, on the other hand, is an actual producer of fabric. It takes the simple thread as it comes from the spindle, and transforms it into the many diversified forms of staple fabrics, and articles of useful and fanciful wearing apparel, as has already, upon a previous page, been shown in speaking of the capabilities of the machine.

AWARDS.

Wherever Aiken's Machine has been exhibited, it has in no instance failed of eliciting the most flattering encomiums. In 1859 medals were "awarded to J. B. Aiken for Family Knitting Machine," as follows: One by the South-Carolina Institute, Charleston, S. C.; one by the American Institute, New-York city, and one by the Mechanics' Institute, Richmond, Va. Beside the above, there were awarded to the machine, in 1860, a silver medal, by the Mechanics' Institute, at Richmond; also, the highest premium, by the Louisiana State Fair, held at Baton Rouge; and the

CITIZENS' GRAND MEDAL OF HONOR,

the highest premium in its gift, by the Mechanics' Fair at Cincinnati, Ohio, in addition to premiums in Alabama and other States.

TESTIMONIALS

OF

PURCHASERS AND OPERATORS.

From the many testimonials which we are constantly receiving from those who are using our Family Knitting Machines, in every section of the country, we make room for the few which are subjoined:

Newborn, Newton County, Ga., Nov. 15, 1860.

Having tested the working properties of one of your Family Knitting Machines for nine months, I take pleasure in saying to you that it is a good invention, easily managed, easily kept in order, and worthy of all commendation. May it have an extensive circulation, and you meet with ample reward for your ingenuity.

John W. Pitts.

Cincinnati, Ohio, December 4, 1860.

I have had one of Aiken's Family Knitting Machines in use for the past twelve months. It surpasses my most sanguine expectations. I have not failed in any thing I have attempted to knit. I have made hose of all sizes, both cotton and woolen: Ladies' opera capes, Nubian scarfs, undersleeves, gents' comforts, undervests and drawers, and many other useful articles. It is a *labor-saving treasure.* One Machine will keep three or four ladies employed, in finishing articles never out of use or fashion.

Miss Susannah Branson.

Jersey City, N. J., December 10, 1860.

I have been using one of your Family Knitting Machines for some time. It is truly an admirable thing, not more remarkable for the elegance and simplicity of its construction than for the rapidity and perfection of its work. It is truly astonishing to see how, even in its most rapid revolution, it never fails to take up every loop.

Sarah V. Manning.

COURTLAND, ALA., November 13, 1860.

So far as the Family Knitting Machine has been tried it comes up fully to your representations. It certainly makes the most regular, close, and best knitting I have ever seen. The Machine is a marvelous specimen of mechanical ingenuity. I am very much pleased with mine.

E. M. SWOOPE.

RICHMOND, IND., November 16, 1860.

I have had one of your Machines in my family for the last year, and am highly pleased with it. The simplicity of its construction, and the ease and facility of its operation, elicit universal admiration. I can perceive no wear upon it, although it has been in constant use. Not one needle has been changed. I purchased it solely for the use of our own family; but, yielding to the urgent solicitations of the many friends who have witnessed the elegance, firmness and durability of its work, I have done more than my own knitting. At the end of three months after receiving the Machine from you, I was astonished to find that, in addition to the care of my little ones and my other household duties, I had earned the full price of my Machine. It is, emphatically, a labor-saving invention.

E. N. GRIFFITH.

WILTON, ME., December 1, 1860.

I believe my Family Knitting Machine capable of knitting almost any thing—sleeves, shirts, hose, table covers, tidies, scarfs—in fact I have not tried to knit any thing in which I have not succeeded. The ease and pleasure with which the Machine is operated, aside from profits, are much more than I anticipated.

Miss M. R. FLOOD.

BROOKLYN, N. Y., December 10, 1860.

A friend of mine has owned and run one of your Family Knitting Machines for some time past, and has realized, from operating it, over three dollars per day, and is very busy during the present hard times.

W. A. COCHRAN.

BOSTON, December 11, 1860.

I have used one of your Family Knitting Machines a short time, and like it very much. It is much easier kept in order than any sewing machine with which I am familiar. If a needle does not work, it takes but a moment for a person of the smallest skill to insert another in its place. The longer I use mine the better it works.

Mrs. M. W. RUSSELL, 11 Marion Street.

Liberty, Mo., November 25, 1860.

I have been using one of your Family Knitting Machines for several months, and am much pleased with it. The work is better than that done by hand. A lady can knit and finish, with your Machine, a dozen pairs of hose in just about the same time that is required to knit a single pair by hand, and with much less fatigue. G. G. Hildreth.

Cincinnati, November 19, 1860.

I have had one of your Family Knitting Machines in operation for the last ten months. It more than answers my anticipations. I consider the money which I paid for the Machine well invested. An ordinary family may be handsomely supported from it, with but little labor.

J. Wallace.

Nantucket, November 8, 1860.

It gives me pleasure to be able to add my testimony to the value of your Family Knitting Machine. I have used one of your Machines for several months, and in that time have done some very fine work, and made some very heavy and choice hose. The Machine has, thus far, failed in no particular. Not a needle even has yet been changed.

James Thompson.

Tuscumbia, Ala., November 13, 1860.

Simple justice to you compels me to say that your Family Knitting Machine is all you claim for it. I have knit hundreds of pairs of socks and stockings, from the very heavy yarn for the field hand down to the infant's stocking, and have never broken the first needle. It has never been out of repair, and never drops stitches. In truth, as a time-saving and comfort-giving machine, I regard it as without a rival.

Ann Messenger.

Louisville, Ky., November 21, 1860.

The Family Knitting Machine I purchased of you last June works well. I have tested its merits to my own entire satisfaction, and a lady friend, who is an excellent hand knitter, has done likewise. It is easy to learn to operate, and a vast improvement on hand knitting, as it does its work with so much speed and regularity. It is a very great acquisition to a family, where there is a large quantity of knitting to be done.

Wm. Malone.

Battle Creek, Mich., November 12, 1860.

The Knitting Machine purchased of you works admirably. We have knit hose of various sizes—undersleeves, tippets, comforters, &c., &c.—with no other instructions than those sent with the Machine, although I had never seen one of the kind before. Your loop regulator enables the operator to change the loop instantly, so as to knit tight or loose at pleasure, and is an exceedingly simple and ingenious device. I have examined other knitting machines, and regard yours as the best I have seen. For simplicity, perfection and rapidity of work, as well as ease of operation and management, so far as my information extends, it is entirely without a rival.

Yours respectfully, Samuel Adams.

Eaton, Ohio, December 15, 1860.

I have used one of your machines about ten months, and would not part with it for many times its cost, if unable to get another. Beside the care of a large family, it is no uncommon thing for me to make with it a dollar and a dollar and a half a day, and it is no exaggeration to say that with no other cares I could easily make two dollars a day.

I have knit upon it all kinds of cotton and woolen hosiery, and for fancy work it can't be beat. I have knit shawls, nubias, opera capes, sontags, undersleeves, children's sacks, comforts, and other articles too numerous to mention.

I can cheerfully recommend any woman desiring pleasant and profitable employment to buy one of your machines. If necessary, borrow the money, and with industry it can be soon replaced with interest.

Mrs. D. A. Dick.

Chicago, December 17, 1860.

I have been using one of your Family Knitting Machines for some time past, and find that I can accomplish four times the amount of work with it that your agent stated it would perform.

Yours very respectfully, I. B. Mitchell.

OPINIONS OF THE PRESS.

Aiken's Family Knitting Machine is one of the greatest curiosities of the age. Not only does it knit stockings and socks with great rapidity, but its work is done with more regularity and accuracy than can be done by a lady. It will knit a pair of hose in ten minutes. We have not had time to examine it thoroughly, but have seen enough to satisfy us that it will be sought for by farmers and planters, and become as necessary, in large families, as sewing machines.—*Richmond (Va.) Dispatch.*

Aiken's Family Knitting Machine is truly the greatest wonder yet invented. It knits the same as hand knitting, and the rapidity with which it manufactures yarn into stockings and other garments strikes the beholder with astonishment.—*Boston Evening Traveller.*

Aiken's celebrated Knitting Machine is the most ingenious and invaluable thing of the kind ever invented. Every thing works as smooth and regular as a clock, and we are surprised at the number of loops it makes per minute.—*Eagle of the South (Jackson, Mississippi).*

Aiken's Knitting Machine deserves to come into general use. It is one of the most ingenious and useful machines we have ever examined. It does its work well, speedily, and is afforded at a price that places it within the reach of all.—*Indiana Paper.*

This Machine is an excellent one, made to be operated by treadle, like a sewing machine, and is a valuable adjunct to every large family of our land. It will soon occupy a position in the family equal to that of the sewing machine.—*Scientific American.*

This Machine, for speed, simplicity of construction, and the perfect manner in which it does its work, is probably superior to any thing of the kind ever invented.—*N. H. Journal of Agriculture.*

Knitting by hand is fast going out of date, and we predict that this Machine will make ordinary knitting needles, a few years hence, a curiosity.—*Manchester (N. H.) Mirror.*

Aiken's Family Knitting Machine deserves the attention of planters, housekeepers and others, who wish to adopt and enjoy all good improvements and economical machines.—*Charleston (S. C.) Courier.*

With it a negro girl or boy could do all the fine and coarse knitting necessary for the house and plantation.—*Charleston (S. C.) Mercury.*

This Machine can be worked by a child.—*Southern (S. C.) Enterprise.*

There are generally, on almost every plantation, plenty of hands not exactly fitted for field labor, who, with one of these Machines, could knit not only a supply for the plantation, but also for several others.—*Life Illustrated (N. Y.).*

The *Scientific American,* in speaking of this Machine, on exhibition at the late Fair of the American Institute, says:

The article that attracts more attention than any thing else is Aiken's Knitting Machine. The wonderful thing in relation to it is the rapidity and perfection with which it works. The exclamations of the old ladies, who were standing about, bore very flattering testimony to the satisfactory working of the machine.

Its work is better and more even than can be done by hand, and will knit a stocking while a woman is "setting up" one.—*Oswego Commercial Times.*

Aiken's Knitting Machine we consider one of the greatest labor-saving machines of the age.—*Boston News.*

One of the most extraordinary and beautiful of inventions is J. B. Aiken's Family Knitting Machine.—*Charleston (S. C.) Evening News.*

Aiken's Family Knitting Machine is very handsomely and tastefully got up, and is a most ingenious affair.—*Daily Palladium (N. Y.).*

We shall not attempt a description of this Machine. No language can describe it intelligibly. It needs to be seen to be understood. All the operator has to do is to turn a small crank, and the Machine does the rest of the work itself, grinding out a pair of hose "quicker than you could say Jack Robinson."—*Weekly Register (Eaton, Ohio).*

To planters, particularly, who own large numbers of negroes, this invention is almost invaluable, and those who see it in operation will readily become convinced of the fact. A sock is knit in almost an incredible short space of time, as well as other articles of equal usefulness, generally worn by ladies.—*Montgomery (Ala.) Daily Advertiser.*

It is impossible, with pen and ink, to describe the operation of this Machine; we can only advise every body to examine, and be satisfied that steel, iron and cog-wheels, sometimes are really alive.—*Daily Republic* (*Buffalo*).

The Knitting Machine, in working, presents one of the most beautiful and interesting sights that can be imagined. We have never witnessed any thing, in the way of ingenious machinery, that delighted us so much. The rapidity of its performance is almost incredible.—*Buffalo Express.*

One of the most beautiful pieces of mechanism we have ever seen is Aiken's Patent Knitting Machine, for family use and manufacturing purposes. The only ground of objection to its use is, that it does away entirely with the occupation of grandmothers, elderly aunts, &c.—*Buffalo Commercial Advertiser.*

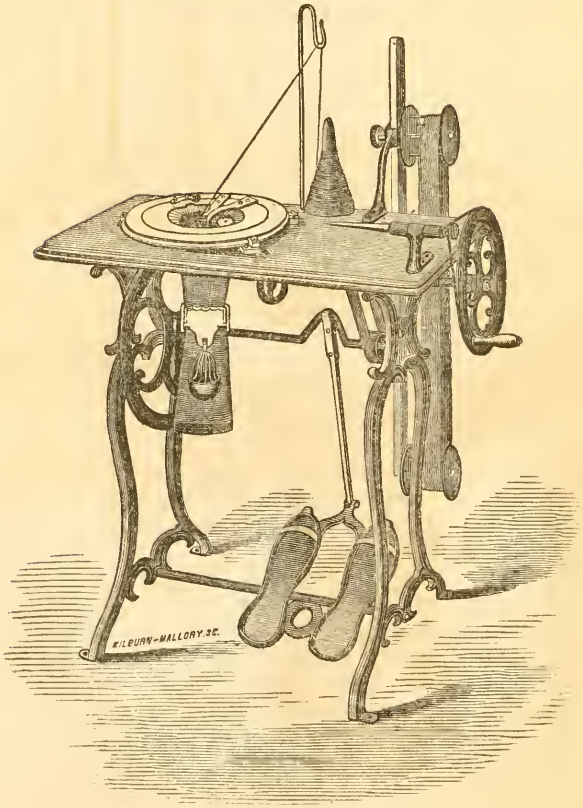
We hail this invention as the liberator of woman—for, of all non-paying and motiveless drudging that the dear creatures are compelled to do, we know of nothing like knitting. Grandmother's mission is now accomplished. She need never again come over to our house and bring her knitting-work. She can do it all at home before breakfast!—*American Ruralist* (*Springfield, Ohio*).

To be realized it must be seen, and to be appreciated it must be set in motion; and then the eye is not able to follow the lightning quickness of its action. It will produce any substantial garment or fancy article that could be made by knitting in the usual way. You say, "Do it," and, ere the sound of your voice has ceased, the clicking of the needles reply, "It is done."—*Family Pictorial* (*New-York*).

We could hardly believe that such a machine was within the inventive powers of man. We can scarcely say what our grandmothers would be tempted to do with a wheel that catches five thousand loops per minute.—*Daily Advocate* (*Baton Rouge, La.*).

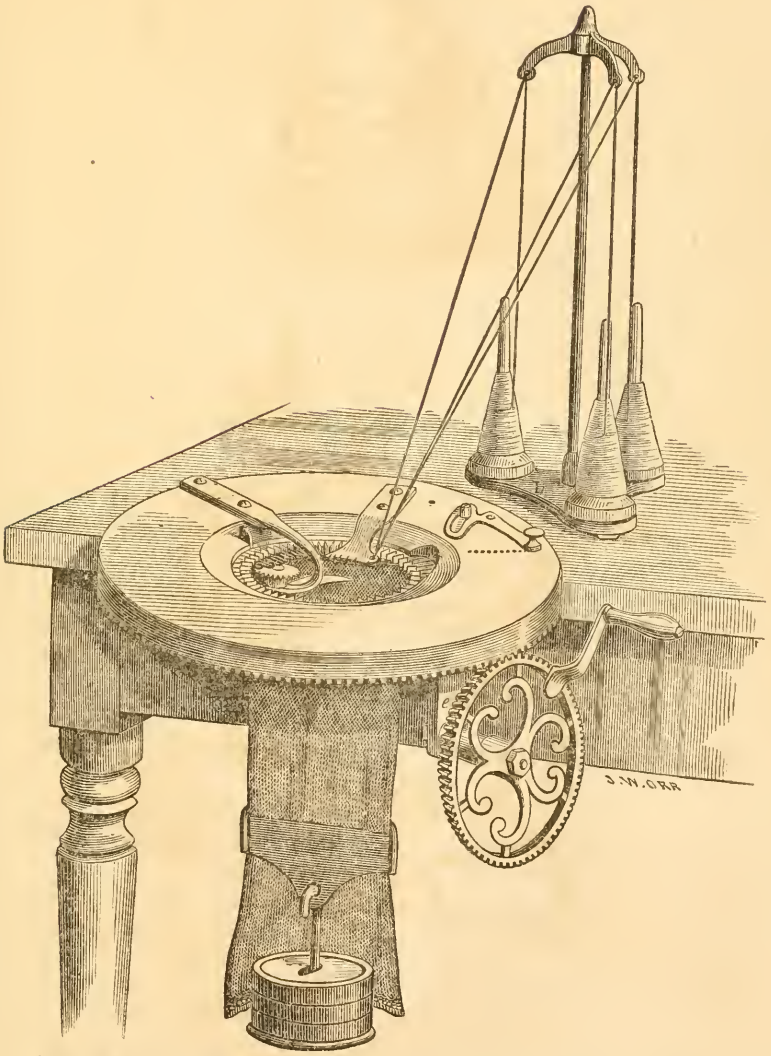
The most ingenious piece of mechanism we have seen in many a day is J. B. Aiken's Family Knitting Machine. It is a greater invention than the sewing machine, and stands next to it in usefulness. The amount of labor it is destined to save those who have to do the knitting for large families is immense. With this Machine a child, ten years of age, will do more knitting in an hour than half a dozen ladies will accomplish in a week in the ordinary way.—*Nashville* (*Tenn.*) *Patriot.*

FOOT POWER MACHINE.



Price, securely packed for transportation, with its appurtenances, $65.

AIKEN'S PORTABLE KNITTING MACHINE.



Price, securely packed, with its appurtenances, for transportation, $40.

COST OF TRANSPORTATION.

Subjoined is an estimate made by the Adams Express Company of the cost of transporting the Portable Machine from the manufactory in Franklin, New-Hampshire, to some of the leading cities of the United States: viz.,

To Boston,	$0.37	To Richmond,	2.37
" New-York,	.87	" Charleston,	2.37
" Detroit,	3.37	" Savannah,	2.37
" Chicago,	2.87	" Montgomery,	3.37
" Cincinnati,	2.37	" Jackson,	3.37
" St. Louis,	2.87	" New-Orleans,	3.37
" Pittsburg,	2.37	" Louisville,	2.63
" Indianapolis,	2.87	" Nashville,	2.87
" St. Paul,	4.87	" Galveston,	4.37
" Des Moines,	4.87	" San Francisco,	8.87

The cost of transporting the Foot Power Machine will be about three times the above rates.

The weight of the Portable Machine, when packed, with all its appurtenances, ready for transportation, is 39 lbs.; that of the Foot Power Machine, 120 lbs.

Parties ordering four or more of these machines, in a single case, by the usual conveyance of heavy packages, will be charged for transportation at rates greatly reduced from those above specified.

Satisfaction guaranteed to every purchaser, or money refunded.

To Correspondents. All letters of inquiry, to secure attention, must inclose a postage stamp.

All orders, inclosing remittances current in New-York City, will receive prompt attention from the Inventor and Manufacturer. Address

J. B. AIKEN,

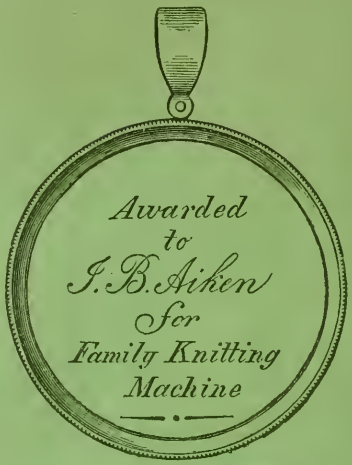
Franklin, N. H.

Apr. 15. 1861. H144 79

IMPRESSIONS OF MEDALS,

AWARDED TO

J. B. AIKEN IN 1859, FOR FAMILY KNITTING MACHINES.



79

THE LIBRARY OF CONGRESS

MAR 72
N. MANCHESTER,
INDIANA 46962